

**To:** Ostrander, David[Ostrander.David@epa.gov]; Ackerman, Joyce[Ackerman.Joyce@epa.gov]; McGrath, Shaun[McGrath.Shaun@epa.gov]  
**Cc:** Way, Steven[way.steven@epa.gov]; Hestmark, Martin[Hestmark.Martin@epa.gov]  
**From:** Card, Joan  
**Sent:** Mon 9/14/2015 8:41:34 PM  
**Subject:** RE: R8 Q&As

So the two pipes have a 4000 gpm capacity? Or higher?

**From:** Ostrander, David  
**Sent:** Monday, September 14, 2015 2:40 PM  
**To:** Card, Joan; Ackerman, Joyce; McGrath, Shaun  
**Cc:** Way, Steven; Hestmark, Martin  
**Subject:** RE: R8 Q&As

I looked at a couple of charts. Flow volume is tied to head and velocity. The lowest flow velocity on one chart had a corresponding rate of 350 gpm at a velocity of 1.1 fps. For two pipes that would be 700 gpm. Flow rates went as high as 4000 gpm with a velocity of 12.8 fps.

**From:** Card, Joan  
**Sent:** Monday, September 14, 2015 2:33 PM  
**To:** Ostrander, David; Ackerman, Joyce; McGrath, Shaun  
**Cc:** Way, Steven; Hestmark, Martin  
**Subject:** RE: R8 Q&As

David, is there a maximum flow estimate for the two pipes? That might be a follow up question.  
Joan

**From:** Ostrander, David  
**Sent:** Monday, September 14, 2015 12:53 PM  
**To:** Ackerman, Joyce; McGrath, Shaun; Card, Joan  
**Cc:** Way, Steven; Hestmark, Martin  
**Subject:** RE: R8 Q&As

revised

# **Deliberative Process/Ex. 5**

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